

**SYSTEM AND METHOD FOR MINIMIZING
IMAGE DEGRADATION IN LCD MICRODISPLAYS**

ABSTRACT OF THE DISCLOSURE

A system and method for writing a video frame row by row in a liquid crystal
5 display (LCD) having a matrix of liquid crystal pixels arranged in a plurality of columns
and a plurality of rows is provided. The system and method are constructed and arranged
to minimize image degradation in the LCD by charging the column capacitors to a mid
gray voltage or some other common fixed voltage prior to writing each row. The fixed
charge voltage may be achieved by coupling all of the column capacitors together and
10 allowing them to equalize to an average voltage before each row is written. In a preferred
embodiment, a successive column or group of columns is charged to the mid gray voltage
while the preceding column is being charged to the desired video voltage and that
sequence is repeated until each pixel in each row is written.

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